

# Air Quality Permitting Statement of Basis

January 27, 2005

# Permit to Construct No. P-030138 Interstate Concrete and Asphalt Company, Hayden Lake Facility ID No. 055-00036

Prepared by:

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**FINAL** 

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### Acronyms, Units, and Chemical Nomenclatures

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

AQCR Air Quality Control Region
CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality
EPA U.S. Environmental Protection Agency

gr/dscf grain (1 lb = 7,000 grains) per dry standard cubic foot

HAPs Hazardous Air Pollutants
HMA hot mix asphalt facility

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance

with the Idaho Administrative Procedures Act

lb/hr pound per hour

MACT Maximum Achievable Control Technology

MMBtu/hr million British thermal units per hour

NESHAP National Emission Standards for Hazardous Air Pollutants

NO<sub>X</sub> nitrogen oxides

NSPS New Source Performance Standards

PM particulate matter

PM<sub>10</sub> particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

PSD Prevention of Significant Deterioration

PTC permit to construct

RAP Recycled asphalt pavement

SIC Standard Industrial Classification

SIP State Implementation Plan

SO<sub>2</sub> sulfur dioxide
TAP toxic air pollutant

T/yr tons per year

μg/m³ micrograms per cubic meter

UTM Universal Transverse Mercator

VOC volatile organic compound

#### PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

#### 2. FACILITY DESCRIPTION

Stockpiled aggregate is transferred to five cold feed bins. Aggregate is dispensed from the bins onto conveyors, which transfer the aggregate to the dryer. RAP material is transferred from stockpiles to a live bottom bin. The bin feeds onto a conveyor to a lump breaker. From the lump breaker, a conveyor feeds the RAP material to the dryer where both aggregate and RAP are heated in the dryer. Aggregate and RAP travel through the rotating dryer counter-current to the heating media. The aggregate and RAP are then screened and stored in hot storage bins, then weighed in batch quantities and transferred to the pugmill mixer. In the pugmill, heated asphalt oil is mixed with the dried and screened aggregate/RAP and the resulting hot-mix asphalt is either loaded into dump trucks for transport off site or transferred via a drag slat conveyor to silos for temporary storage.

#### 3. FACILITY / AREA CLASSIFICATION

Interstate Concrete and Asphalt Company is defined as a synthetic minor facility because, without permit limits on the potential to emit, the PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>X</sub>, and CO emissions would exceed 100 tons per year each. The AIRS classification is "SM80" because the potential to emit of CO is within 80% of the Tier I operating permit major source threshold.

The facility is located within AQCR 62 and UTM zone 11. The facility is located in Kootenai County which is designated as unclassifiable for all criteria pollutants (PM<sub>10</sub>, CO, NO<sub>X</sub>, SO<sub>2</sub>, lead, and ozone).

The AIRS information provided in Appendix A defines the classification for each regulated air pollutant at Interstate Concrete and Asphalt Company. This required information is entered into the EPA AIRs database.

#### 4. APPLICATION SCOPE

The purpose of this permit to construct is for the construction of a new source; recycled asphalt pavement (RAP) and associated material handling equipment.

#### 4.1 Application Chronology

December 19, 2003	DEQ received application for permit to construct
January 13, 2004	Application declared complete
March 5, 2004	Request for facility draft permit received
March 12, 2004	Draft permit sent to facility
March 22, 2004	Comments received from facility
April 21, 2004	Request for sulfur limit modification received via e-mail from facility
May 20 through June 18, 2004	Public comment period.

#### 5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC action.:

#### 5.1 Equipment Listing

The hot mix asphalt plant and baghouse are existing equipment. This permit allows for the addition of equipment associated with the use of RAP in the batch mix process, including an additional bin, a lump breaker, and two conveyors.

#### **Hot Mix Asphalt Plant**

Manufacturer: Madsden/Gencor Ultra II-100

Type of HMA plant: Batch mix Max asphalt capacity: 300 T/hr

HMA burner fuel type: Natural gas, used oil, and fuel oil

Max. HMA burner fuel usage rate: 745 gal/hr Max rated heat input requirements: 105 MMBtu/hr

#### Baghouse

Manufacturer: Standard Havens Model T-230-1151

#### 5.2 Emissions Inventory

There is no net increase in emissions from the addition of the RAP process line. The total throughput of RAP and aggregate combined will not exceed the aggregate throughput limit in the previous permit. RAP emissions are discussed in two sections in AP-42, Section 11.1 for Hot Mix Asphalt Plants. Section 11.1.1.3, Counterflow Drum Mix Plants, states, "...A counterflow drum mix plant can normally process RAP at ratios up to 50 percent with little or no observed effect upon emissions." Section 11.1.2.2, Parallel Flow Drum Mix Plants, states, "...Although it has been suggested that the processing of RAP materials at these type plants may increase organic compound emissions because of an increase in mixing zone temperature during processing, the data supporting this hypothesis are very weak. Specifically, although the data show a relationship only between RAP content and condensible organic particulate emissions, 89 percent of the variations in the data were the result of other unknown process variables." Additionally, none of the emission factor tables in AP-42 differentiate between aggregate types and RAP. The emission estimates for this permitting action are based on AP-42 emission factors. The calculations do not show an increase in emissions from the addition of the RAP process line.

The permit limits from the previous permit are summarized below:

Allowable emissions: SO<sub>2</sub> – 120 lb/hr; 96 T/yr

CO - 144 lb/hr; 96 T/yr

Throughput limit: 7,200 T/day; 480,000 T/yr

Allowable fuel: Natural gas, liquefied petroleum gas, ASTM Grade 1 or 2 fuel oil.

recycled used oil

The emissions estimates are summarized in Table 5.2. The estimates are based on a production rate of 300 tons per hour and 480,000 tons per year. In AP-42, the emission factor for SO<sub>2</sub> for batch mix HMA's is the same for the use of fuel oil and for used oil (0.088 lb/ton). The previous permit established an allowable sulfur percent for recycled used oil of 1.35%. As requested by the facility on April 21, 2004 (Attachment C), the current permit action limits the allowable sulfur percent for used oil (same as recycled used oil) to 0.5%, which is the same as the sulfur limit for ASTM Grade 2 fuel oil. This results in the SO<sub>2</sub> permitted emission limit being reduced from 120 lb/hr and 96 T/yr to 26.4 lb/hr and 21.12 T/yr.

The term "recycled waste oil" was changed in the permit to "used oil" to be consistent with the definition of used oil used in 40 CFR 279.

The toxic air pollutant (TAP) emissions will not increase as a result of the addition of the RAP processing line. Those emissions were evaluated in a previous permit action. Therefore, TAP emissions were not evaluated in this analysis.

Table	47	<b>EMISSIONS</b>	PCTTMA	TTC
EMENE		THE RESERVE AND ADDRESS OF THE PARTY OF THE	T. 7 & # # 173 M	

Pollutant	Maximum Emissions (lb/hr)*	Maximum Emissions (T/yr) <sup>b</sup>
PM (total)	12.6	10.08
PM <sub>10</sub> (total)	8.1	6.48
CO	120	96
NO <sub>x</sub>	36	28.8
SO <sub>2</sub>	26.4	21.12
VOC°	10.8	8.64

Pounds per hour

### 5.3 Modeling

DEQ reviewed the modeling analysis submitted by the facility and determined that it followed the DEQ Air Quality Modeling Guideline and demonstrated compliance with the applicable regulatory limits to DEO's satisfaction.

From the permit application, the ambient pollutant concentrations are shown in Table 5.3.

Table 5.3 AMBIENT POLLUTANT CONCENTRATIONS

Pollutant	Averaging Period	Total Ambient Impact* (μg/m³) <sup>b</sup>	Background Concentration (µg/m³)	Total Ambient Concentration <sup>c</sup> (µg/m³)	NAAQS <sup>c</sup> (μg/m³)	Percent of NAAQS
со	8-hour	266	3,400	3,666	10,000	37
	1-hour	380	10,200	10,580	40,000	26
NO <sub>2</sub>	Annual	9.1	32	41.1	100	41
	Annual	6.7	8	14.7	80	18
SO <sub>2</sub>	24-hour	33	26	59	365	16
	3-hour	75	42	117	1,300	9
D)./	Annual	2.1	27	29.1	50	58
PM <sub>10</sub>	24-hour	10	81	91	150	61

Impact from facility-wide emissions

The modeled concentrations, including the background, are less than the NAAQS.

b) Tons per year

Micrograms per cubic meter

National Ambient Air Quality Standards

#### 5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.201...... Permit to Construct Required

Interstate Concrete and Asphalt Company requested a permit to construct for a new facility which will emit PM and PM<sub>10</sub>. The total PM and PM<sub>10</sub> emissions from the new facility will not increase the total emissions from the existing HMA facility because the total throughput of aggregate from the existing facility and RAP from the new facility combined will be the same as the currently-permitted aggregate throughput from the existing facility.

40 CFR 60 Subpart I..... Standards of Performance for Hot Mix Asphalt Facilities

This subpart is applicable to the addition of the RAP processing system according to 60.90 (a), as follows: "(a) The affected facility to which the provisions of this subpart apply is each hot mix asphalt facility. For the purpose of this subpart, a hot mix asphalt facility is comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems." Also, per 60.90(b), this system "commences construction or modification after June 11, 1973."

Section 60.92, Standard for particulate matter, states: (a) On and after the date on which the performance test required to be conducted by 60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility any gases which: (1) Contain particulate matter in excess of 90 mg/dscm (0.04 gr/dscf). (2) Exhibit 20 percent opacity, or greater.

The loading, transferring, and storing systems associated with the RAP facility are subject to the opacity testing requirement specified in 40 CFR 60.8, 60.92(a)(2), and 60.93(b)(2). 40 CFR 60.93(b)(2) specifies that Method 9 and the procedures in 60.11 be used to determine opacity. Permit Conditions 2.4 and 2.5 have been modified to more accurately incorporate the 40 CFR 60.92 requirements. Permit Condition 2.17 requires testing. Permit Condition 2.24 requires that a test protocol be submitted prior to testing, and Permit Condition 2.25 requires that the test results be submitted to DEQ within 30 days after the date that the testing is concluded.

In addition to the testing required by Subpart I, the facility is required to test the affected facility for particulate emissions and visible emissions at least once every five years.

40 CFR 60 Subpart OOO ...... Standards of Performance for Nonmetallic Mineral Processing Plants

Subpart OOO does not apply to this facility.

The section for applicability and designation of affected facility, 60.670 (a)(1), is as follows: "Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart."

[break in section]

"(b) An affected facility that is subject to the provisions of subpart F or I or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart."

Subpart F is for portland cement plants. Subpart I is for hot mix asphalt facilities.

This permitting action is for the inclusion of recycled asphalt pavement equipment. 40 CFR 60, Subpart OOO, does not apply because the lump breaker is not a rock crusher or a grinding mill. The RAP is crushed at a separate facility prior to processing at this facility. The lump breaker at this facility breaks up clumps of conglomerated RAP to a size that is fed onto a conveyor. Oversize stone is rejected, not crushed, by the system. The February 27, 2004 letter from Interstate Concrete and Asphalt Company for Facility ID No. 055-00048 shows an example of a RAP breaker. That letter is provided as Appendix B. Clearly, the lump breaker is not a crusher.

In addition, this facility is subject to Subpart I, and, per Subpart OOO (b), Subpart OOO is not applicable to facilities which are subject to Subpart I.

40 CFR 279 ...... Standards for the Management of Used Oil

Part 279.11 contains specifications for used oil which include allowable levels for arsenic, cadmium, chromium, lead, the flash point, and total halogens. The limit for total halogens is listed at 4,000 ppm maximum. However, used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under § 279.10(b)(1). Such used oil is subject to subpart H of part 266 of this chapter rather than this part when burned for energy recovery unless the presumption of mixing can be successfully rebutted. According to Interstate Concrete and Asphalt Company, the used oil that is used by the facility does not contain total halogens greater than 1,000 ppm, so, as agreed with the facility in the April 21, 2004 e-mail (Attachment C), the permit limits the total halogens to 1,000 ppm.

Permit Condition 2.9 states that, in accordance with 40 CFR 279.11, used oil burned for energy recovery shall not exceed any of the allowable levels of the constituents and property listed in Table 2.3.

TABLE 2.3 USED OIL SPECIFICATIONS<sup>1</sup>

Constituent/property	Allowable level
Arsenic	5 ppm² maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 deg. F minimum
Total halogens	1,000 ppm maximum

The specification does not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see 40 CFR 279.10(b)).

This table is based on Table 1 from 40 CFR 279.11, incorporating the 1,000 ppm limit for total halogens as explained above.

#### 5.5 Fee Review

Interstate Concrete and Asphalt Company paid the \$1,000 application fee as required in IDAPA 58.01.01.224 on December 19, 2003.

A permit to construct processing fee of \$1,000 is required in accordance with IDAPA 58.01.01.225 because the increase in emissions from the addition of the new facility is less than one T/yr. The \$1,000 processing fee was received on March 31, 2004.

Parts per million

The Interstate Concrete and Asphalt Company facility is not a major facility as defined in IDAPA 58.01.01.008.10. Therefore, registration fees are not applicable in accordance with IDAPA 58.01.01.387.

#### 6. PERMIT CONDITIONS

#### **Permit Condition 2.1**

A description of the facility was added which includes a description of the RAP processing.

#### **Permit Condition 2.2**

A description of the control device (baghouse) which controls emissions from the HMA was added. The baghouse is existing equipment.

#### **Permit Condition 2.3**

The SO<sub>2</sub> and CO emissions are limited because the emissions were limited in the previous permit. The emissions from the drum dryer were estimated at the maximum permitted production throughput rate. There are no increases in either permitted or estimated emissions from this permitting action. The calculated emissions, using AP-42 emissions factors, will not exceed the amount estimated in the application as long as the permitted throughput is not exceeded. The facility is rated as an "SM-80" source because the CO emissions limit is within 80% of the major source thresholds.

#### Permit Condition 2.22

The permittee shall not operate the HMA plant in any PM<sub>10</sub> nonattainment areas or proposed nonattainment areas, without obtaining a permit which specifically allows for operations in a PM<sub>10</sub> nonattainment areas.

#### Permit Condition 2.23

This permit condition specifies the requirements for used oil certification.

#### 7. PUBLIC COMMENT

A draft permit was provided for facility review on March 12, 2004. Comments were received from the facility on March 22, 2004. Changes were made as requested.

The draft permit was also provided to the Coeur d'Alene Regional Office of the DEQ on March 12, 2004. No comments were received.

An opportunity for public comment period on the PTC application was provided, in accordance with IDAPA 58.01.01.209.01.c. A request for a public comment period on DEQ's proposed action was received in March 2004. A public comment period was provided from May 20 through June 18, 2004. Comments were received from a member of the public. The comments are the same as those received for Interstate's PTC No. P-040101. The comments and DEQ's responses are presented as Appendix D of this document.

#### 8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommend that Interstate Concrete and Asphalt Company be issued final PTC No. P-030138 for the addition of a RAP material handling line. The project does not involve PSD requirements. A public comment period on the air quality aspects of the proposed permit was provided as required by IDAPA 58.01.01.209.01.c.

CZ/sd Permit No. P-030138

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# APPENDIX A AIRS Information P-030138

## AIRS/AFS\* FACILITY-WIDE CLASSIFICATIOND DATA ENTRY FORM

Facility Name: Interstate Concrete and Asphalt Company
Facility Location: Hayden Lake
AIRS Number: 055-00036

AIR PROGRAM POLLUTANT	**	ners (end)				1112V	AREA CLASSIFICATION  A Attaches and  El-Operanding  P. Nagathiansi
SO <sub>2</sub>	SM						U
NO,	SM						U
CO	SM				Y		U
PM <sub>10</sub>	SM	SM					U
PT (Particulate)	SM						U
voc	В						U
THAP (Total HAPs)	В						
		Air	KARLE SIR	PART			
		I					

<sup>\*</sup> Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

#### <sup>b</sup> AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

### APPENDIX B

February 27, 2004 Letter Re: Lump Breaker

P-030138



Route to:
- Mareline
- Roth SF.

RECEIVED

MAR - 1 2004

Department of Environmental Coality State Air Program

February 27, 2004

Harbi Elshafei Idaho Dept. of Environmental Quality 1410 N. Hilton Boise, ID 83706

Subject: Permit to Construct 55-00048 Modification, Rathdrum, Idaho

Dear Mr. Elshafei,

This letter is in response to our telephone conference this AM and I hope that it will clarify our intent.

- 1. RAP Lump Breaker: This is a cold feed bin that sits adjacent to the other aggregate cold feed bins at the plant. The only difference being it feeds a machine that is called a RAP Breaker that basically forces the RAP down through counter rotating drums that break up any oversize pieces prior to being dropped onto the main conveyor which feeds the plant drum. There are RAP crushers available however we have opted not to use one. I have enclosed copies of specifications for a RAP Breaker.
- 2. Concrete Batch Plant: You spoke of a proposed limitation of 5000 hours in the Permit Modification request. I cannot find any wording in the request that would reflect that. On page 2 paragraph 5 of the request it states that we are not requesting a change of limitations for the concrete batch plant.
- 3. Existing Crusher: The crusher that is listed in the currant permit has been somewhat cannibalized and no longer exists for all intensive purposes. All remaining parts will be removed. The only crushing that would take place would be done by a portable crusher as needed.



4. The reason we are requesting a permit that would include an asphalt plant, concrete plant and crusher is that the permit would mirror the existing permit with newer equipment plus allow us to use a portable crusher as needed and not have a crusher sitting on site when not being in use. It is also understood that the crusher would be permitted in the State of Idaho and would not be using a generator for power at this site.

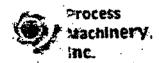
I will be sending you a flow diagram within a few days. Please contact me at 765-1144 if you need additional information to make the requested revision to our permit.

Sincerely.

Corky Witherwax Aggregate Sales/

**Environmental Manager** 

Encl: 2



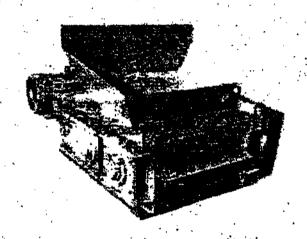
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Parts Order Form

Asphalt Recycle -Breakers, Crushers & Systems

RAP Breaker Rap Systems RAP Crusher Recycle Systems Parts

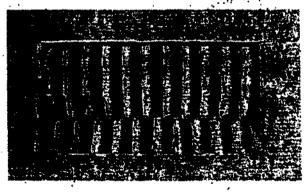
#### PMI RAP Breaker





Process Machinery has manufactured this time proven quality roll style breaker for over 20 years.

# Now you can buy direct!



Our hardened steel teeth mounted on counter-rotating drurns will size RAP to plant requirements.

#### Rap Breaker Specifications:

- 25 hp direct coupled crusher duty motor
- Double reduction concentric shaft reducer with end-shelf type motor mount
- Hardened steel wear tips on drum leath
- Extra large receiving hopper to accommodate up to a 36" wide conveyor
- Externally mounted heavy duty piloted flange bearings on drums

- Externally mounted drive tensioner
- Heavy duty abrasion resistant bott in side wear liners
- Spring return floating drum for tramp iron reject
- Lubrication manifold is centrally located for ease of maintenance
- Production capacity of up to 150 TPH

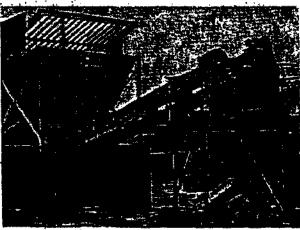


#### Optional Features:

- Stationary drum cleaner assembly
- Tramp iron and oversize stone reject grizzly assembly
- Electromagnetic tramp iron removal assembly.
- Free standing mounting platform to cover feed chute

Back to Too

#### RAP Breaker & Recycle Systems.



Feed meterial can contain up to "footbal" size conglomerated millings,

Adjustable Grizzly-reject framp iron and oversize material.

The breaker reduces millings to 1" or smaller.

The breaker has tramp iron protection built in.

Reduced RAP is conveyed to plant.

#### PMI Recycle Systems

- Custom Designed to fit your needs
- Stationary and portable designs are available
- Conveyors
- Screens
- Rep bins
- · Grizzly feeders
- Horizontal shaft impact crushers
- Rep breakers
- Chutes
- Hoppers
  - Whatever you need to greate the system you want!
  - PMI can provide lumkey solutions

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# APPENDIX C

April 21, 2004 E-Mail Re: Sulfur Content and Halogen Limit

P-030138

From:

"Witherwax, Corky" <cwitherwax@oldcastle-materials.com>
"WILLIAM ROGERS" <WROGERS@DEQ.STATE.ID.US>

To: Date:

4/21/04 9:25PM

Subject:

Sulfur content and Total Halogens limits

Bill.

My apologies that I did not get this to you right away. I would like to make the request that the Sulfur content limits on all of our permit requests be changed to 0.5%. Furthermore we would agree to the Total Halogens limitation being placed at 1000 ppm for the spec oil.

I would also like to request that the existing Tier II Operating Permit for the Wyoming facility #055-00048 have the HMA plant and Crusher removed from it upon the issuance of the separate permits for a HMA plant and Crusher for that site. This would leave the Concrete Batching facility operating under the Tier II Operating permit.

Thank you,

Corky Witherwax

Aggregate Sales/

Environmental Manager

CC: "CAROLE ZUNDEL" <CZUNDEL@DEQ.STATE.ID.US>, "HARBI ELSHAFE!" <HELSHAFE@DEQ.STATE.ID.US>

# APPENDIX D

# Response to Public Comments P-030138

# Response to Public Comments Submitted During the Public Comment Period for Interstate Concrete and Asphalt Company, Hayden Lake Permit to Construct No. P-030138 Facility ID No. 055-00036

As required by IDAPA 58.01.01.209.01.c of the Rules for the Control of Air Pollution in Idaho (Rules), the Idaho Department of Environmental Quality (DEQ) provided proposed Permit to Construct (PTC) No. P-030138 for Interstate Concrete and Asphalt Company (Interstate) located in Hayden Lake, for public notice and comment. Public comment packages, which included the application materials, the proposed permit, and the associated air quality statement of basis, were made available for public review at DEQ's Coeur d'Alene Regional Office, Rathdrum Public Library, and DEQ's state office in Boise. A copy of the proposed PTC No. P-030138 and the statement of basis was also posted on DEQ's Web site. The public comment period for the PTC was provided from May 20 through June 18, 2004.

The following is a summary list of all documents received from the public containing comments on the above referenced permit action.

- 1. Randy Tetzner Letter to DEQ, dated 6-30-04
- 2. Randy Tetzner Document to DEQ, dated 6-30-04

This section provides the air quality related comments submitted on the proposed action and DEQ's responses to those comments. Based on the application materials and the Rules, DEQ has responded only to those comments that directly relate to the air quality aspects of the permit.

#### 1. Comments taken from Randy Tetzner Letter, dated 6-30-04

#### Comment No. 1

I have found this comment procedure confusing. I was so confused I was unaware of a similar permit request by Interstate to burn waste oil even closer to our home. I would like my comments about their Rathdrum Idaho facility to be added to the Hayden Lake comments, regardless if the comment period is over or not. I emailed Ms. Lechtenberg numerous times concerning start dates for comments and never received answers. As a result I did not know my rights, interstate should not be allowed to pollute and have DEQ mislead citizens about how the comment process works.

#### DEQ Response to Comment No. 1

A 30-day public comment period was provided from May 20 through June 18, 2004, for the proposed PTC for Interstate Concrete's Hayden Lake facility. A 30-day public comment period was also provided from June 1 through June 30, 2004, for the proposed PTC for Interstate Concrete's Rathdrum facility. Public comments were only received during the Rathdrum comment period. Per commenter request, DEQ considered the comments received for the Rathdrum permit also for the Hayden Lake permit.

In regards to proper public notification procedure, the public was notified of both comment periods through several methods. First, a legal notice for each public comment period was published in the Coeur d' Alene newspaper which provided information about the purpose of the comment period, dates of the public comment period, the address to submit public comments, and the location of materials for review (application, draft permit, and DEQ's analysis). In addition, public notice information was also provided on DEQ's website at <a href="https://www.deq.state.id.us">www.deq.state.id.us</a> which presents the same information as in the legal notice, and also allows the user to download copies of the draft permit and DEQ's analysis (known as the Statement of Basis) in PDF format. DEQ also maintains an interested parties list which provides email notification of all upcoming public comment periods. In addition to this list, an email notification of a public comment period is also provided to the person or persons who requested a public comment period on a specific permit. DEQ records indicate that the

commenter was provided email notification on both comment periods.

#### 2. Comments taken from Randy Tetzner Document, dated 6-30-04

#### Comment No. 2

"...By allowing this company to burn waste oil, we are already going to be the recipient of hundreds of tons of extra pollutants, and those are the ones the EPA finds in oil that is supposed to be good. Factor in the fact that as many as 16,000 different locations will be needed to get the oil and you have a nightmare of trying to ensure the contaminated oil stays away from 1daho. The actual figure of needed sites will probably go as high as 30,000 because many producers of waste oil only get their oil picked up every 2 to 3 months. Monthly pick-ups are not the norm. Most of the oil comes from business that have pickups every 2 to 3 months. The problem is that all the testing is done before the oil is ever even shipped. Oil can sit for weeks and months after it is tested, it can be further contaminated. Despite the fact that halogenated wastes are not a part of waste oil, contamination of waste oil has become so prevalent that it is routinely listed as an ingredient of waste oil. Anything can happen to waste oil when it is off site. The only way to ensure the law is followed is to have each and every shipment checked when it is delivered to Interstate. Hopefully the permit will be denied making this point moot. There is no way to track backwards were a contaminant came from. No one tests oil by the tanker load; the oil is tested on the producer's tanks farms, which have storage from 10,000 to 250,000 gallons. After the oil is put in a tanker there is no control over what can happen..."

#### DEQ Response to Comment No. 2

The permits for both facilities include the following requirements for used oil:

#### **Used Oil Specifications**

In accordance with 40 CFR 279.11, with the exception of total halogens which are limited to 1,000 ppm, used oil burned for energy recovery shall not exceed any of the allowable levels of the constituents and property listed in Table 2.3.

TABLE 2.3 USED OIL SPECIFICATIONS<sup>1</sup>

	+
Constituent/property	Allewable level
Arsenic	5 ppm² maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 deg. F minimum
Total halogens	1,000 ppm maximum

The specification does not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see 40 CFR 279.10(b)).

#### **Used Oil Fuel Certification**

The permittee shall demonstrate compliance with the used oil fuel specifications in Permit Condition 2.9 by obtaining a used oil fuel certification from the used oil fuel supplier on an as-received basis. The certification shall include the following information:

- The name and address of the used oil supplier
- The measured concentration, expressed as ppm, of each constituent listed in Table 2.2

<sup>2</sup> Parts per million

- The flash point of the used oil expressed as degrees Fahrenheit
- The analytical method or methods used to determine the concentration of each constituent and property (flash point) listed in Table 2.2
- The date and location of each sample
- The date of each certification analysis

Records of each certification shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

This permit condition will ensure that the oil delivered at the site has a certification from the supplier on an as-received basis.

#### Comment No. 3

In the January 18<sup>th</sup> report, which was produced by Aspen Consulting & Engineering, Inc. they describe Interstates current set up as one, using natural gas. (Introduction 1.0) and that the new set up will have a "bag house" control. As I understand it the baghouse is to collect large particulate contamination that is only found when burning waste oil. The report continues to state that even though RAP is being swapped for cold aggregate, this would mean no increase in particulate contamination. I find this difficult to follow. Increasing production rates by 100 tons an hour, adding a bag house and burning waste oil will most definitely cause on increase in particulate emissions.

#### DEQ Response to Comment No. 3

A baghouse is a very effective control device for controlling particulate matter emissions. In most cases, the collection efficiency of a baghouse is greater than 99% for particulate matter. Regardless, the PM standard for this facility is 0.04 grains per dry standard cubic foot. The permittee is required to demonstrate compliance with this standard under worst-case normal operations which are, in this case, using RAP and burning used oil. To ensure the baghouse is operated optimally, the permittee is required to develop an O&M manual based on the baghouse manufacturers design operating specifications.

#### Comment No. 4

The report by Aspen also shows a drawing of an asphalt plant, presumably the one Interstate has. The drawing however is simply a plagiarized copy of EPA diagrams from their AP-42, Section 11 et seq. publication. The EPA has 3 such drawings, while one can clearly see Aspen used a altered copy, they did not cite the EPA publication as the original creator of the diagram, leading people to think they were looking at a diagram of what exists in Rathdrum at present. The EPA diagrams have either a RAP Bin & Conveyor or a Collector in the upper left of the diagrams. The one submitted as figure one in Aspen's report has neither. Does the Aspen diagram accurately depict what Interstate has in Rathdrum? Does the missing a RAP Bin & Conveyor or a Collector shown on EPA diagrams of asphalt mixing plants but not on Interstates submission mean anything? Is Interstate using new technology not even known to the EPA? Why are those items missing from Interstate's proposal diagram?

#### Comment No. 5

PM<sub>10</sub> is Particulate Matter; the report is 77.2 tons per year. Aspen does not give enough information for me to check the figures they are using to calculate PM<sub>10</sub>. But in their spreadsheet in Appendix C they use the figure of .032 lb per ton. To arrive at the figure of 77.2 tons I see they added the PM<sub>10</sub> from existing batch cement and exiting rock crushing plant fugitives, is this assumption correct? Also how does this new and higher PM<sub>10</sub> amount affect our air? What can the particulate carry into the air from interstates site?

#### Comment No. 6

In the modeling analysis from interstate that was reviewed, in Section 3.4.1 the reviewer states they are not aware of the methodology utilized by interstate to arrive at the figures they submitted in Table 7. It shows Interstate will also go over the acceptable levels of formaldehyde. If the reviewer is unsure how Interstate arrived at it's figures, how can the citizens of Idaho and my family be convinced the report is not flawed? How can we be sure Interstate has not submitted a proposal that is dangerous or otherwise illegal? There was also a comment from DEQ stating the Applicant's formaldehyde refined Modeling Analysis Results (Table 9 Section 3.4.2 of applicants modeling analysis Appendix C) this model was submitted because of high levels of formaldehyde emissions burning waste oil. This submitted model shows acceptable rates of formaldehyde. I do not understand the 1987 through 1991 data submitted, nor do I understand how the modeling was done.

Seeing as how this is the first waste oil burning asphalt plant in N. Idaho these figures were probably developed on some theoretical level, and to my surprise are suddenly acceptable levels. The only way to get actual emission outputs is to burn the waste oil in Interstates Dryer and test the emissions several times over a period of a month or two. This submitted model to me has no basis in fact. The EPA supplies the data as to what is emitted when you burn waste oil in an asphalt plant and now suddenly some mathematician has submitted data, which miraculously lowers the rate of formaldehyde emissions? I think of this model as a sham.

#### Comment No. 7

I do see from the information provided that Interstate is increasing the amount of pollutants in the air an additional 20 tons of NOR, an additional 43 tons of Sulfur Dioxide, it appears that by burning natural gas they did not produce this previously. One of the down sides of burning waste oil is the incredible amounts of sulfur dioxide produced, .055 lbs per ton. An additional 60 tons of Carbon Monoxide awaits each of us along with 24 tons of VOC's and eight tons of TAPS/HAPS. The report states we get 10 tons less of PM<sub>10</sub> per year, I do not see how a reduction can be made using waste oil as the fuel. I see Interstate pays a \$7,500.00 permit fee, is this annual or one time? Either way it is a cheap way to pollute the air.

#### DEQ Response to Comment Nos. 4 through 7

These comments apply specifically to the Interstate Concrete and Asphalt Company at Rathdrum permit. Therefore, the responses to these comments are addressed in that permit, P-040101.

#### Comment No. 8

I was only able to find the following break down of how to calculate costs per ton to produce asphalt I have asked interstate how much natural gas is used and the cost of the natural gas to produce one ton of asphalt. These telephone calls go unreturned. Surprisingly the environmental manger, Corky Witherwax has no clue as to how much in natural gas does it cost to produce a ton of asphalt, nor was the company willing to tell me any cost savings they would realize by using waste oil. From the below information it seems one high cost is Salaries and Benefits using up 30% of the incoming cash flow. Interstate also has to support the people who do nothing but produce and deliver concrete. If it shows that there cost savings burning waste oil are minimal, why allow it? Burning waste oil emits a lot of contaminants into the air and is a breeding ground for unknown contaminants not even routinely tested for. I have a feeling the cost savings will be significant for the company to invest in this ability to burn waste oil. Therefore I believe the company will have the resources to test each and every load of waste oil once it arrives at its proposed Rathdrum site and before it is burned. There also needs to be included in the permit a contingency plan of what to do and who to call if they get a bad load of oil. This new hazardous material will also require upgrades with the current fire protection agencies Haz-Mat team. How much money will interstate be paying for this additional burden? Or perhaps I will have to pay it as an increase in my property taxes? I do not think that would be fair for the taxpayers to boot additional funding required keeping us safe. Eventually there will be a spill and Haz-Mat will have to respond, so who pays for their start up costs?

#### **DEQ Response to Comment No. 8**

The air quality permit addresses the requirements of IDAPA 58.01.01.200-228 for issuing permits to construct. With regard to used oil, the permit contains limits to assure associated air pollutant emissions do not exceed applicable standards. The permit requires that the used oil be certified on an as-received basis to assure the oil does not contain any contaminants in excess of the imposed limits.

#### Comment No. 9

Stack emissions need to be taken at least 8 times in the next 2 years to ensure other contaminants are not being introduced and that the alleged amounts deemed to be tolerated are not exceeded. After that require 2 stack emissions tests per year. It is unfair for one test a year at a known time, which would motivate anyone to ensure they burn cleaner.

#### DEQ Response to Comment No. 9

Performance testing is only required for PM emissions in accordance with 40 CFR 60.92. Limits placed on the concentration of the contaminants in the used oil are shown through modeling to not violate any respective ambient standard. As such, DEQ is not requiring testing of the used oil contaminants. To assure the facility continues to meet the NSPS grain loading and opacity standards, emissions testing is required on a frequency of no less than once every five years.

#### Comment No. 10

DEQ should expand the testing for other heavy metals, the federal regulations gives the state the right to make on-spec oil requirements more stringent than federal regulations.

#### **DEQ Response to Comment No. 10**

DEQ requires that the facility conduct a PM emissions test. The operating temperature of a hot-mix asphalt plant is far below the melting point of any of the metals identified as contaminants in the used oil. Consequently, the metals should be emitted as particulate, which will be part of that that is measured. So long as the facility meets the NSPS grain loading requirement and the used oil contaminants do not exceed the permit limits, compliance with ambient air quality standards will be demonstrated.

End.